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EXAMINER

IBRAHIM, MOHAMED

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/671,154	Applicant(s) ARSIKERE ET AL.	
	Examiner MOHAMED IBRAHIM	Art Unit 2444	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-19 and 21-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5-19 and 21-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

1. This action is in response to the communications and remarks filed on 23 June 2009.

Claims 1, 5-19 and 21-27 are presently pending for examination.

Response to Arguments

2. Applicant's arguments filed 06/03/2009 have been fully considered but they are not persuasive.

Applicant, in substance, argues,

A) Klassen references fails to teach or suggest computing network throughput by averaging the data transmission rates of selected ones of the blocks, wherein the selected ones of blocks consist of all of the blocks for which the data transmission rate was computed during the measurement when the network is known to be a bursty network and only those blocks for which the data rate was computed to be less than a prescribed amount from the average data transmission rates of all the blocks transmitted during the measurement when the network is known to be a non-bursty network.

In response to applicant's argument,

A) Klassen is a comprehensive reference that discloses the analysis and evaluation of communications network. In particular, Klassen discloses the transmission of test packets through the network for evaluating and measuring the network utilization and performance wherein these test packets are conducted both during bursty and non-

bursty times of the network (see Klassen, col. 2 lines 10-43 and col. 7 lines 1-16).

Furthermore, Klassen discloses measuring the network's throughput by steaming pings and divides the two-way throughput of the network bandwidth in order to get average throughput of the network (see Klassen, col. 6 lines 1-28 and col. 8 lines 43-52).

Therefore the combined references, in particular, Klassen meets the required scope of the claimed limitations as currently presented.

Again, it is the Examiner's position that Applicant has not yet submitted claims drawn to limitations, which define the operation and apparatus of Applicant's disclosed invention in manner, which distinguishes over the prior art. It is advised that, in order to further expedite the prosecution of the application in response to this action, Applicant should amend the base claims to describe in more narrow detail the true distinguishing features of Applicant's claim invention.

Failure for Applicant to significantly narrow definition/scope of the claims and supply arguments commensurate in scope with the claims implies the Applicant intends broad interpretation be given to the claims. The Examiner has interpreted the claims with scope parallel to the Applicant in the response, and reiterates the need for the Applicant to more clearly and distinctly define the claimed invention.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klassen et al. (Klassen), U. S. Patent No. 6711137 in view of Kloth et al. (Kloth) U. S. Patent No. 7324524.

Regarding claim 1, Klassen discloses a method of measuring the throughput of a network (see e.g. col. 2 line 64-col. 3 line 49; system determines and analyses network throughput), comprising: transmitting a block of data over the network (see e.g. col. 4 lines 58-64 and col. 6 line 65-col. 7 line 17; sending testing data/packets across data communication network); measuring a value representative of the transmit time of the block (see e.g. col. 5 lines 19-38, and col. 6 lines 1-8); computing the data transmission rate of the block (see e.g. col. 6 lines 9-40); repeating steps (see e.g. col. 16 lines 20-33) a), b) and c) until a stop event occurs, wherein the stop event is the first to occur of transmitting a number of blocks or the passage of an amount of time (see e.g. col. 6 lines 9-40 and col. 15 line 40-col. 16 line 20); computing the network throughput by averaging the data transmission rates of selected ones of the blocks (see e.g. col. 17 lines 14-52 and col. 18 lines 12-32 and 35-50) and outputting the computed network throughput (see e.g. fig. 4 and col. 5 lines 5-8).

Although Klassen discloses the invention substantially as claimed, it does not specifically disclose that wherein the size of a block of data is selected to fill a network packet.

Kloth teaches a method of transferring data via computerized networks wherein the size block of the transmitted data is adequate to fill the available capacity of the packet (see

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Kloth, col. 11 lines 29-46). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Klassen with that of Kloth. Motivation for doing so would have been to fully utilize the available bandwidth during a transmit opportunity (see Kloth, col. 11 lines 74-49).

Regarding claim 5, Klassen-Kloth teaches wherein the size of a block of data is selected to cause the application layer of a computer connected to the network to pass a message containing the block to the network without buffering delay (see e.g. col. 2 line 64-col. 3 line 14).

Regarding claim 6, Klassen-Kloth teaches wherein the transmit time is measured at the application programming layer of a computer connected to the network (see e.g. col. 1 lines 52-64 and col. 4 lines 43-55).

Regarding claim 7, Klassen-Kloth teaches wherein transmitting a block of data comprises generating a message from an application program running on an operating system that establishes a socket having a buffer and the method additionally comprises setting the size of the socket buffer (see e.g. col. 3 lines 18-49 and col. 10 lines 6-12).

Regarding claim 8, Klassen-Kloth teaches wherein the size of a block of data is less than 2 kilobytes (see e.g. col. 2 lines 9-18 and col. 8 lines 43-52).

Regarding claim 9, Klassen-Kloth teaches wherein the throughput is measured in the upstream throughput and the method additionally comprises measuring the downstream throughput (see e.g. col. 6 lines 9-40).

5. Claims 10-19 and 21-27 are rejected under 35 U.S.C. 103(a) as being obvious over Klassen in view of Kloth and further in view of Kaffine et al. (Kaffine), U. S. Patent No. 6654914.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

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Regarding claims 10, 17, 21 and 24, Klassen-Kloth teaches the invention substantially as claimed however they do not explicitly disclose presenting diagnostic web page to the user.

Kaffine discloses a system for data network that includes multiple diagnostic units each adapted to communicate with a network user for the purpose of isolating a fault in the network. The user is presented with result of the diagnostics through a diagnostic web page which intern displays the results of the diagnostics on the monitor of the user's computer (see e.g. figs. 7, 9 and 14, col. 11 lines 45-50 and col. 17 lines 26-37). At the time of the invention it would have been obvious to a person of ordinary skills in the art to combine the teachings of Kaffine with that of Klassen-Kloth. Motivation for doing so would have been to permit a fast and efficient way of monitoring network performance and isolating network fault by analyzing test results received from a diagnostic unit through a diagnostic web page (see Kaffine col. 2 lines 34-43).

Regarding claim 11, Klassen-Kloth-Kaffine teaches wherein the web page is presented to the user as an HTML page that contains a script that causes the user computer to transmit blocks of data to the server (see e.g. col. 6 line 64-col. 7 line 30).

Regarding claim 12, Klassen-Kloth-Kaffine teaches wherein the network is an ADSL network and the computed throughput represents the upstream throughput (see e.g. col. 6 lines 9-28).

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Regarding claim 13, Klassen-Kloth-Kaffine teaches wherein the downstream throughput is separately measured (see e.g. col. 10 lines 42-64).

Regarding claim 14, Klassen-Kloth-Kaffine wherein the HTML page additionally contains a test payload that is transmitted in the blocks of data (see e.g. col. 2 lines 9-25).

Regarding claim 15, Klassen-Kloth-Kaffine teaches wherein repetitively transmitting blocks of data wherein: a) transmitting a block of data comprises transmitting a block from the server to the user computer (see e.g. col. 4 lines 58-64 and col. 6 line 65-col. 7 line 17; sending testing data/packets across data communication network); and b) the value representative of transmit time is derived from the time between successive acknowledgements from the user computer (see e.g. col. 2 lines 37-52).

Regarding claim 16, Klassen-Kloth-Kaffine teaches wherein the server is a diagnostic unit installed in the network (see e.g. col. 4 line 43-col. 4 line 5)

Regarding claim 18, Klassen-Kloth-Kaffine teaches wherein the passage of time is less than 10 seconds (see e.g. fig. 6 and col. 10 lines 21-41).

Regarding claim 19, Klassen-Kloth-Kaffine teaches additionally comprising providing the computed throughput to a call enter for an internet service provider (see e.g. col. 6 lines

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41-63).

Regarding claim 22, Klassen-Kloth-Kaffine teaches wherein the diagnostic unit measures throughput in the upstream and downstream directions (see e.g. col. 3 lines 18-49).

Regarding claim 23, Klassen-Kloth-Kaffine teaches wherein the diagnostic measures downstream throughput by transmitting blocks of data to the user computer and for measuring a value representative of time by measuring the time difference between acknowledgement messages sent by the user computer (see e.g. col. 6 lines 9-40).

Regarding claim 25, Klassen-Kloth-Kaffine teaches wherein the diagnostic unit operates under the control of an application program running on an operating system and the operating system enables communication over the network between the application program and the user computer by establishing a socket that has a buffer that is larger than the size of each block of data and the application program additionally comprises programming that sets the size of the socket buffer (see e.g. fig. 1 and col. 3 lines 18-49 and col. 10 lines 6-12).

Regarding claim 26, Klassen-Kloth-Kaffine teaches wherein the size of the socket buffer is set to between 2 Kbytes and 16 Kbytes (see e.g. col. 10 lines 27-41).

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Regarding 27, Klassen-Kloth-Kaffine teaches wherein the size of the socket buffer is set to between 8 Kbytes and 12 Kbytes (see e.g. col. 2 lines 9-18 and col. 8 lines 43-52).

Prior Art of Record

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to form PTO-892 (Notice of Reference Cited) for a list of relevant prior art.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMED IBRAHIM whose telephone number is (571)270-1132. The examiner can normally be reached on Monday through Friday from 7:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn, Jr. can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mohamed Ibrahim/
Examiner, Art Unit 2444
/William C. Vaughn, Jr./
Supervisory Patent Examiner, Art Unit 2444